

Table E-1. Emission Source Data for Onshore and State Waters Construction Activities - North Monterey Bay Landing Site - La Selva to Fort Ord (via Sand City).

·	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	2	47
Cable Pulling Winch	80	0.50	1	40	4.4	4	2	36
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	1.5	35
Vibratory Trencher	100	0.60	1	60	6.7	4	1.5	40
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	1.5	0.4
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	22	517
Cable Pulling Winch	80	0.50	1	40	4.4	4	22	391
Caisson Construction/Land Trenching								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35
Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore					,			
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	30	1	1,518
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	30	1	503
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	30	1	333
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.5	1	383
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.5	1	55
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Note: (1) Based on an installation rate of 4 miles/day and a total distance of 6.8 miles.

- (2) Based on an installation rate of 0.8 miles/day and a total distance of 1.2 miles.
- (3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.
- (4) Based on an installation rate of 1 mile/day and a total distance of 21.7 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 15 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 15 nm within state waters.

Table E-2. Emission Source Data for Onshore and State Waters Construction Activities - South Monterey Bay Landing Site - Fort Ord to San Jose (Monterey and San Benito Counties Only).

Cable Laying into Existing Conduit (1)           Winch-Mounted Truck         350         0.20         1         70         3.9         6         9         212           Cable Pulling Winch         80         0.50         1         40         4.4         4         9         160           Cable Trenching along Roads (2)         Trencher-Mounted Truck         350         0.30         1         105         5.9         4         1.5         35           Fuglitive Dust (3)         NA         NA         NA         0.24         NA         NA         NA         1.5         0.4           Cable Hanging on Existing Utility Poles (4)         Winch-Mounted Truck         350         0.20         1         70         3.9         8         22         690           Cable Pulling Winch         80         0.50         1         40         4         8         22         781           Cable Hanging on Existing Utility Poles (4)         Winch-Mounted Truck         350         0.20         1         70         3.9         8         22         690           Cable Langling on Existing Utility Poles (4)         80         0.20         1         60         1         36 </th <th></th> <th>Horsepower</th> <th>Load</th> <th>Number</th> <th>Нр-</th> <th>Gal/</th> <th>Hours</th> <th>Work</th> <th>Total Fuel</th>		Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel	
Winch-Mounted Truck   350   0.20   1   70   3.9   6   9   212	Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)	
Cable Pulling Winch   80   0.50   1   40   4.4   4   9   160	Cable Laying into Existing Conduit (1)									
Cable Trenching along Roads (2)   Trencher-Mounted Truck   350   0.30   1   105   5.9   4   1.5   35     Vibratory Trencher   100   0.60   1   60   6.7   4   1.5   40     Fuglitive Dust (3)   NA   NA   NA   NA   NA   NA   NA   N	Winch-Mounted Truck	350	0.20	1	70	3.9	6	9	212	
Trencher-Mounted Truck   350   0.30   1   105   5.9   4   1.5   35	Cable Pulling Winch	80	0.50	1	40	4.4	4	9	160	
Vibratory Trencher	Cable Trenching along Roads (2)		•							
Fugitive Dust (3)	Trencher-Mounted Truck	350	0.30	1	105	5.9	4	1.5	35	
Cable Hanging on Existing Utility Poles (4)           Winch-Mounted Truck         350         0.20         1         70         3.9         8         22         690           Cable Pulling Winch         80         0.50         1         40         4.4         8         22         781           Caisson Construction/Land Trenching           Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Dirictional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739	Vibratory Trencher	100	0.60	1	60	6.7	4	1.5	40	
Winch-Mounted Truck   350   0.20   1   70   3.9   8   22   690   Cable Pulling Winch   80   0.50   1   40   4.4   8   22   781   Caisson Construction/Land Trenching	Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	1.5	0.4	
Cable Pulling Winch   80   0.50   1   40   4.4   8   22   781	Cable Hanging on Existing Utility Poles (4)									
Caisson Construction/Land Trenching           Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         132           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1<	Winch-Mounted Truck	350	0.20	1	70	3.9	8	22	690	
Backhoe	Cable Pulling Winch	80	0.50	1	40	4.4	8	22	781	
Supply Truck w/ Crane	Caisson Construction/Land Trenching									
Trencher-Mounted Truck 350 0.30 1 105 5.9 6 1 35 Wibratory Trencher 100 0.60 1 60 6.7 6 1 40    Shore Horizontal Directional Drilling	Backhoe	105	0.60	1	63	3.5	6	2	42	
Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Landing to Shore         Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1	Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8	
Shore Horizontal Directional Drilling	Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35	
Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Power Winch - Onshore         100         0.40         1         40         2.2         4         1         9 <td cols<="" td=""><td>Vibratory Trencher</td><td>100</td><td>0.60</td><td>1</td><td>60</td><td>6.7</td><td>6</td><td>1</td><td>40</td></td>	<td>Vibratory Trencher</td> <td>100</td> <td>0.60</td> <td>1</td> <td>60</td> <td>6.7</td> <td>6</td> <td>1</td> <td>40</td>	Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Drilling Mud Sediment Remover   550   0.60   1   330   18.5   8   5   739	Shore Horizontal Directional Drilling									
Work/Dive Boat     340     0.30     1     102     5.7     12     2     137       Cable Landing to Shore     Cable Lay Vessel - Main Engines     2,300     0.12     2     552     27.6     24     2     1,325       Cable Lay Vessel - Generator     1,290     0.25     1     323     16.8     24     2     805       Cable Lay Vessel - Generator     970     0.22     1     213     11.1     24     2     533       Barge Tugboat     1,300     0.40     Total Hp     520     29.1     12     2     699       Work/Dive Boat     340     0.30     1     102     5.7     12     2     137       Power Winch - Onshore     100     0.40     1     40     2.2     4     1     9       Offshore Cable Laying/Burying (5)       Cable Lay Vessel - Main Engines     2,300     0.22     2     1,012     50.6     38     1     1,923       Cable Lay Vessel - Generator     1,290     0.25     1     323     16.8     38     1     1,923       Cable Lay Vessel - Generator     970     0.22     1     213     11.1     38     1     422       Vessel Return (6) <td>Tracked Drill Rig</td> <td>460</td> <td>0.70</td> <td>1</td> <td>322</td> <td>18.0</td> <td>8</td> <td>5</td> <td>721</td>	Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721	
Cable Landing to Shore         Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422	Drilling Mud Sediment Remover	550	0.60	1	330	18.5	8	5	739	
Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137	
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)       5       5.7       12       2       1       9         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)       2       2,300       0.64       2       2,944       153.1       3.2       <	Cable Landing to Shore									
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325	
Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805	
Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533	
Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699	
Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137	
Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       38       1       1,923         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9	
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       38       1       637         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Offshore Cable Laying/Burying (5)									
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       38       1       422         Vessel Return (6)       Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       3.2       1       490	Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	38	1	1,923	
Vessel Return (6)       2,300       0.64       2       2,944       153.1       3.2       1       490	,	1,290	0.25	1	323	16.8	38	1	637	
Cable Lay Vessel - Main Engines         2,300         0.64         2         2,944         153.1         3.2         1         490	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	38	1	422	
Cable Lay Vessel - Generator         970         0.44         1         427         22.2         3.2         1         71	Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	3.2	1	490	
	Cable Lay Vessel - Generator	970	0.44	1	427	22.2	3.2	1	71	

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35.2 miles. Includes route from Fort Ord to Santa Clara County bo

- (4) Based on an installation rate of 1 mile/day and a total distance of 7.5 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 19 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 19 nm within state waters.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 1.1 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-3. Emission Source Data for Onshore and State Waters Construction Activities - South Monterey Bay Alternative Landing Site - Point Lobos to San Jose (Monterey and San Benito Counties Only).

Acidity/Equipment Type         (Hp)         Factor         Active         Hrs         Now         Days         Usage (Gal)           Cable Laying into Existing Conduit (1)         350         0.20         1         70         3.9         3         9         106         0.00         20         1         70         3.9         3         9         106         0.00         20         1         40         44         20         9         80         0.00         20         1         40         40         40         9         2		Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Winch-Mounted Truck         350         0.20         1         70         3.9         3         9         106           Cable Pulling Winch         80         0.50         1         40         4.4         2         9         80           Cable Trenching along Roads (2)         Trencher-Mounted Truck         350         0.30         1         105         5.9         2         <	Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Pulling Winch   Robert State   Robert State	Cable Laying into Existing Conduit (1)								
Cable Trenching along Roads (2)           Trencher-Mounted Truck         350         0.30         1         105         5.9         2         2         24           Mibratory Trencher         100         0.60         1         60         6.7         2         2         2         2           Fugitive Dust (3)         NA         NA         0.24         NA         NA         NA         2         0.5           Cable Hanging on Existing Utility Poles (4)         Winch-Mounted Truck         350         0.20         1         70         3.9         6         19         447           Cable Pulling Winch         80         0.50         1         40         4         4         19         337           Caisson Construction/Land Trenching         8         0.50         1         6         1         4         4         19         337           Caisson Construction/Land Trenching         105         0.60         1         6         5         6         1         8         2         4         4         2         1         8         1         2         1         8         1         3         5         6         1         3         3	Winch-Mounted Truck	350	0.20	1	70	3.9	3	9	106
Trencher-Mounted Truck   350   0.30   1   105   5.9   2   2   24     Vibratory Trencher   100   0.60   1   60   6.7   2   2   27     Fugitive Dust (3)   NA   NA   0.24   NA   NA   NA   0.2   0.5     Cable Hanging on Existing Utility Poles (4)     Winch-Mounted Truck   350   0.20   1   70   3.9   6   19   447     Cable Pulling Winch   80   0.50   1   40   44   4   19   337     Cable Pulling Winch   80   0.50   1   63   3.5   6   2   42     Supply Truck w/ Crane   250   0.30   1   75   4.2   2   1   8     Trencher-Mounted Truck   350   0.30   1   105   5.9   6   1   35     Vibratory Trencher   250   0.30   1   105   5.9   6   1   40     Shore Horizontal Directional Drilling   460   0.70   1   322   18.0   8   5   721     Drilling Mud Sediment Remover   550   0.60   1   330   18.5   8   5   721     Drilling Mud Sediment Remover   550   0.60   1   330   18.5   8   5   721     Drilling Mud Sediment Remover   550   0.60   1   330   18.5   8   5   739     Work/Dive Boat   2.300   0.12   2   552   27.6   24   2   1.325     Cable Lay Vessel - Main Engines   2.300   0.12   2   552   27.6   24   2   1.325     Cable Lay Vessel - Generator   1.290   0.25   1   323   16.8   24   2   533     Barge Tugboat   1,300   0.40   701   140   2.2   4   1   9     Work/Dive Boat   340   0.30   1   102   5.7   12   2   699     Work/Dive Boat   340   0.30   1   302   31   31   31   31   31   31     Power Winch - Onshore   32,300   0.22   2   1,012   50.6   16   1   31     Offshore Cable Laying/Burying (5)   320   321   323   36.8   36   36   36   36   36   36     Cable Lay Vessel - Generator   2,300   0.22   2   1,012   50.6   36   1   36     Cable Lay Vessel - Generator   2,300   0.22   2   1,012   50.6   36   1   36     Cable Lay Vessel - Generator   3,000   0.22   2   1,012   50.6   36   1   30     Offshore Cable Laying/Burying (5)   32   32   32   32   33   33   34   34	Cable Pulling Winch	80	0.50	1	40	4.4	2	9	80
Vibratory Trencher         100         0.60         1         60         6.7         2         2         27           Fugitive Dust (3)         NA         NA         NA         0.24         NA         NA         NA         2         0.5           Cable Hanging on Existing Utility Poles (4)           Winch-Mounted Truck         350         0.20         1         70         3.9         6         19         447           Cable Pulling Winch         80         0.50         1         40         4.4         4         19         337           Caisson Construction/Land Trenching         8         8.0         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Supply Truck w/ Crane         250         0.30         1         105         5.9         6         1         35           Supply Truck w/ Crane         250         0.30         1         105         5.9         6         1         35           Supply Truck w/ Crane         250         0.30         1         105         6.7         6	Cable Trenching along Roads (2)								
Fuglitive Dust (3)	Trencher-Mounted Truck	350	0.30	1	105	5.9	2	2	24
Cable Hanging on Existing Utility Poles (4)           Winch-Mounted Truck         350         0.20         1         70         3.9         6         19         447           Cable Pulling Winch         80         0.50         1         40         44         4         19         337           Caisson Construction/Land Trenching         *** Use of Construction/Land Trenching           Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         50         0.60         1         105         5.9         6         1         35           Shore Horizontal Directional Drilling         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat	Vibratory Trencher	100	0.60	1	60	6.7	2	2	27
Winch-Mounted Truck         350         0.20         1         70         3.9         6         19         447           Cable Pulling Winch         80         0.50         1         40         4.4         4         19         337           Caisson Construction/Land Trenching         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         2.300         0.12         2         552 <t< td=""><td>Fugitive Dust (3)</td><td>NA</td><td>NA</td><td>0.24</td><td>NA</td><td>NA</td><td>NA</td><td>2</td><td>0.5</td></t<>	Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	2	0.5
Cable Pulling Winch         80         0.50         1         40         4.4         4         19         337           Caisson Construction/Land Trenching         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         133           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         1,325	Cable Hanging on Existing Utility Poles (4)								
Caisson Construction/Land Trenching         Seachoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drielling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323	Winch-Mounted Truck	350	0.20	1	70	3.9	6	19	447
Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig           A60         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         132           Cable Lay Vessel - Generator         1,290         0.25         1         333         16.8         24         2         805           Cable Lay Vessel - Generator         9,70         0.22         1         213 <td>Cable Pulling Winch</td> <td>80</td> <td>0.50</td> <td>1</td> <td>40</td> <td>4.4</td> <td>4</td> <td>19</td> <td>337</td>	Cable Pulling Winch	80	0.50	1	40	4.4	4	19	337
Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1	Caisson Construction/Land Trenching								
Trencher-Mounted Truck         350         0.30         1         105         5.9         6         1         35           Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         340         0.30         0.40         104         <	Backhoe	105	0.60	1	63	3.5	6	2	42
Vibratory Trencher         100         0.60         1         60         6.7         6         1         40           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Landing to Shore         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         805           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         699           Work/Dive Boat         340         0.30         1         102         5.7         <	Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Landing to Shore         Use State Laging Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Power Winch - Onshore         100         0.40         1 <td>Trencher-Mounted Truck</td> <td>350</td> <td>0.30</td> <td>1</td> <td>105</td> <td>5.9</td> <td>6</td> <td>1</td> <td>35</td>	Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35
Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Power Winch - Onshore         100         0.40         1         40         2.2         4         1         9	Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Drilling Mud Sediment Remover         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Landing to Shore         Users           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Power Winch - Onshore         100         0.40         1         40         2.2         4         1         9           Offshore Cable Laying/Burying (5)           Cable Lay Vessel - Main Engines         <	Shore Horizontal Directional Drilling								
Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Cable Landing to Shore       State Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       268         Cable Lay Vessel - Generator       970       0.22       <	Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Cable Landing to Shore         Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178	Drilling Mud Sediment Remover	550	0.60	1	330	18.5	8	5	739
Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6) <td>Work/Dive Boat</td> <td>340</td> <td>0.30</td> <td>1</td> <td>102</td> <td>5.7</td> <td>12</td> <td>2</td> <td>137</td>	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214     <	Cable Landing to Shore								
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       16       1       810         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       16       1       268         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       16       1       178         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       1.4       1       214	Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	16	1	810
Vessel Return (6)         2,300         0.64         2         2,944         153.1         1.4         1         214	Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	16	1	268
Cable Lay Vessel - Main Engines 2,300 0.64 2 2,944 153.1 1.4 1 214	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	16	1	178
, , , , , , , , , , , , , , , , , , ,	Vessel Return (6)								
Cable Lay Vessel - Generator         970         0.44         1         427         22.2         1.4         1         31	Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	1.4	1	214
	Cable Lay Vessel - Generator	970	0.44	1	427	22.2	1.4	1	31

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35 miles. Includes route from Pt. Lobos to Santa Clara County bor

- (4) Based on an installation rate of 1 mile/day and a total distance of 18.8 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 8 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 8 nm within state waters.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 1.3 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-4. Emission Source Data for All Land Alt - MBUAPCD

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Hp-
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Hrs
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	8	3,360
Cable Pulling Winch	80	0.50	1	40	4.4	4	8	1,280
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	156	65,520
Vibratory Trencher	100	0.60	1	60	6.7	4	156	37,440
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	156	37.4

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 31 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 125 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-5. Emission Factors for Equipment Associated with Global Photon Project Installation Activities.

	Fuel		Grams/Hp-Hr							
Equipment Type	Туре	TOC	ROC	СО	NOx	SO2	PM	PM10	Source	
Backhoe	G	8.9	8.1	198.0	4.8	0.0	0.1	0.1	(1)	
Drill Rig/Mud Unit	D	1.4	1.3	3.0	14.0	0.9	1.0	1.0	(2)	
Trencher	D	1.1	1.0	4.8	10.3	0.9	1.3	1.2	(1)	
Truck s	D	1.1	1.0	2.8	9.6	0.9	0.8	0.8	(1)	
Vessel Engines/Generators	D	19.8	19.0	57.0	419.0	75.0	9.0	8.8	(3)	
Winch	G	9.4	8.6	199.0	5.2	0.3	0.3	0.3	(2)	
Fugitive Dust							110.0	55.0	(4)	

Notes: (1) Table 2-07 (EPA 1991).

- (2) AP-42, Table 3.3-1, Vol I. (EPA 1996).
- (3) Lloyd's Register of Shipping, London 1990, 1993, and 1995, units in pounds/1000 gallons. From Acurex Env. Corp. 1996.
- (4) Fugitive Dust Background Document/Tech. Information Document for Best Available Control Measures (EPA 1992). Units in pounds per acre-day.

Table E-6. Daily Emissions Associated with the North Monterey Bay Landing Site Installation Activities - Site - La Selva to Fort Ord (via Sand City).

Site - La Selva to i ort Ord (via Sai	Pounds Per Day							
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10			
Cable Laying into Existing Conduit								
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1			
Subtotal	4.0	72.8	10.7	0.9	0.8			
Cable Trenching along Roads								
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7			
Fugitive Dust	0.0	0.0	0.0	0.0	13.2			
Subtotal	1.5	5.1	14.3	1.3	14.6			
Cable Hanging on Existing Utility Poles								
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1			
Subtotal	4.0	72.8	10.7	0.9	0.8			
Caisson Construction/Land Trenching								
Backhoe	6.7	165.0	4.0	0.0	0.0			
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3			
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1			
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0			
Subtotal	9.3	173.6	28.7	2.2	2.4			
Shore Horizontal Directional Drilling								
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7			
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Subtotal	16.2	38.7	189.7	15.8	12.1			
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8			
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5			
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3			
Barge Tugboat	6.6	19.9	146.4	26.2	3.1			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1			
Subtotal	36.3	169.9	734.7	131.3	15.5			
Offshore Cable Laying/Burying								
Cable Lay Vessel - Main Engines	28.8	86.5	636.0	113.9	13.4			
Cable Lay Vessel - Generator	9.6	28.7	210.8	37.7	4.4			
Cable Lay Vessel - Generator	6.3	19.0	139.5	25.0	2.9			
Subtotal	44.7	134.2	986.3	176.6	20.8			
Vessel Return								
Cable Lay Vessel - Main Engines	7.3	21.8	160.4	28.7	3.4			
Cable Lay Vessel - Generator	1.1	3.2	23.2	4.2	0.5			

Subtotal	8.3	25.0	183.6	32.9	3.9
MBUAPCD Daily Thresholds	NA	NA	NA	NA	82

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-7. Daily Emissions Associated with the South Monterey Bay Landing Site Installation Activities - Fort Ord to San Jose (Monterey and San Benito Counties Only).

		Pounds Per Day						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10			
Cable Laying into Existing Conduit								
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Cable Pulling Winch	0.4	1.0	3.4	0.3	0.3			
Subtotal	1.3	3.6	12.3	1.1	1.0			
Cable Trenching along Roads								
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7			
Fugitive Dust	0.0	0.0	0.0	0.0	13.2			
Subtotal	1.5	5.1	14.3	1.3	14.6			
Cable Hanging on Existing Utility Poles								
Winch-Mounted Truck	1.3	3.5	11.9	1.1	0.9			
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2			
Subtotal	7.3	143.8	15.5	1.3	1.2			
Caisson Construction/Land Trenching								
Backhoe	6.7	165.0	4.0	0.0	0.0			
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3			
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1			
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0			
Subtotal	9.3	173.6	28.7	2.2	2.4			
Shore Horizontal Directional Drilling								
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7			
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Subtotal	16.2	38.7	189.7	15.8	12.1			
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8			
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5			
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3			
Barge Tugboat	6.6	19.9	146.4	26.2	3.1			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1			
Subtotal	36.3	169.9	734.7	131.3	15.5			
Offshore Cable Laying/Burying								
Cable Lay Vessel - Main Engines	36.5	109.6	805.7	144.2	17.0			
Cable Lay Vessel - Generator	12.1	36.3	267.0	47.8	5.6			
Cable Lay Vessel - Generator	8.0	24.0	176.7	31.6	3.7			
Subtotal	56.7	170.0	1,249.3	223.6	26.3			
Vessel Return								
Cable Lay Vessel - Main Engines	9.3	27.9	205.3	36.7	4.3			
Cable Lay Vessel - Generator	1.3	4.0	29.8	5.3	0.6			
Subtotal	10.7	32.0	235.0	42.1	4.9			

MBUAPCD Daily Thresholds NA NA NA NA 82

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-8. Daily Emissions from the South Monterey Bay Alternative Landing Site Installation Activities - Point Lobos to San Jose (Monterey and San Benito Counties Only).

		Pounds Per Day						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10			
Cable Laying into Existing Conduit								
Winch-Mounted Truck	0.5	1.3	4.4	0.4	0.4			
Cable Pulling Winch	1.5	35.1	0.9	0.0	0.1			
Subtotal	2.0	36.4	5.4	0.5	0.4			
Cable Trenching along Roads								
Trencher-Mounted Truck	0.5	1.3	4.4	0.4	0.4			
Vibratory Trencher	0.3	1.3	2.7	0.2	0.3			
Fugitive Dust	0.0	0.0	0.0	26.4	13.2			
Subtotal	0.8	2.6	7.2	27.0	13.9			
Cable Hanging on Existing Utility Poles								
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7			
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1			
Subtotal	4.0	72.8	10.7	0.9	0.8			
Caisson Construction/Land Trenching								
Backhoe	6.7	165.0	4.0	0.0	0.0			
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3			
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1			
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0			
Subtotal	9.3	173.6	28.7	2.2	2.4			
Shore Horizontal Directional Drilling								
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7			
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Subtotal	16.2	38.7	189.7	15.8	12.1			
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8			
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5			
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3			
Barge Tugboat	6.6	19.9	146.4	26.2	3.1			
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6			
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1			
Subtotal	36.3	169.9	734.7	131.3	15.5			
Offshore Cable Laying/Burying								
Cable Lay Vessel - Main Engines	15.4	46.1	339.2	60.7	7.1			
Cable Lay Vessel - Generator	5.1	15.3	112.4	20.1	2.4			
Cable Lay Vessel - Generator	3.4	10.1	74.4	13.3	1.6			
Subtotal	23.9	71.6	526.0	94.2	11.1			
Vessel Return								
Cable Lay Vessel - Main Engines	4.1	12.2	89.8	16.1	1.9			
Cable Lay Vessel - Generator	0.6	1.8	13.0	2.3	0.3			
Subtotal	4.7	14.0	102.8	18.4	2.2			

MBUAPCD Daily Thresholds NA NA NA NA 82

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-9. Total Emissions Associated with the North Monterey Bay Landing Site Installation Activities - Site - La Selva to Fort Ord (via Sand City).

Site - La Selva to i dit Ola (via Sain	Pounds						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10		
Cable Laying into Existing Conduit							
Winch-Mounted Truck	1.9	5.2	17.8	1.6	1.4		
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2		
Subtotal	8.0	145.6	21.4	1.8	1.7		
Cable Trenching along Roads							
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1		
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0		
Fugitive Dust	0.0	0.0	0.0	0.0	19.8		
Subtotal	2.3	7.7	21.5	1.9	21.8		
Cable Hanging on Existing Utility Poles							
Winch-Mounted Truck	21.1	57.0	195.6	18.1	15.6		
Cable Pulling Winch	66.4	1,544.3	40.0	2.1	2.5		
Subtotal	87.5	1,601.3	235.6	20.2	18.2		
Caisson Construction/Land Trenching							
Backhoe	13.4	330.0	8.0	0.0	0.1		
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3		
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1		
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0		
Subtotal	16.0	338.6	32.7	2.3	2.4		
Shore Horizontal Directional Drilling							
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4		
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1		
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2		
Subtotal	77.1	182.0	862.4	63.8	58.7		
Cable Landing to Shore							
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7		
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1		
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7		
Barge Tugboat	13.3	39.8	292.8	52.4	6.2		
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2		
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1		
Subtotal	69.5	269.6	1,467.6	262.5	31.0		
Offshore Cable Laying/Burying							
Cable Lay Vessel - Main Engines	28.8	86.5	636.0	113.9	13.4		
Cable Lay Vessel - Generator	9.6	28.7	210.8	37.7	4.4		
Cable Lay Vessel - Generator	6.3	19.0	139.5	25.0	2.9		
Subtotal	44.7	134.2	986.3	176.6	20.8		
Vessel Return							
Cable Lay Vessel - Main Engines	7.3	21.8	160.4	28.7	3.4		
Cable Lay Vessel - Generator	1.1	3.2	23.2	4.2	0.5		

Subtotal	8.3	25.0	183.6	32.9	3.9
Total Emissions - Pounds	313	2,704	3,811	562	158
Total Emissions - Tons	0.16	1.35	1.91	0.28	0.08

Table E-10. Total Emissions Associated with the South Monterey Bay Landing Site Installation Activities - Fort Ord to San Jose (Monterey and San Benito Counties Only).

Activities - Fort Ord to Sair Jose (w	Pounds							
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10			
Cable Laying into Existing Conduit								
Winch-Mounted Truck	8.6	23.3	80.0	7.4	6.4			
Cable Pulling Winch	3.3	8.9	30.5	2.8	2.4			
Subtotal	11.9	32.2	110.5	10.2	8.8			
Cable Trenching along Roads								
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1			
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0			
Fugitive Dust	0.0	0.0	0.0	0.0	19.8			
Subtotal	2.3	7.7	21.5	1.9	21.8			
Cable Hanging on Existing Utility Poles								
Winch-Mounted Truck	28.2	76.0	260.7	24.2	20.9			
Cable Pulling Winch	132.8	3,088.5	80.1	4.2	5.0			
Subtotal	160.9	3,164.6	340.8	28.3	25.9			
Caisson Construction/Land Trenching								
Backhoe	13.4	330.0	8.0	0.0	0.1			
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3			
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1			
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0			
Subtotal	16.0	338.6	32.7	2.3	2.4			
Shore Horizontal Directional Drilling								
Tracked Drill Rig	36.8	86.0	397.5	26.4	11.7			
Drilling Mud Unit	37.7	88.2	407.4	27.1	7.1			
Work/Dive Boat	2.6	7.8	57.4	10.3	4.7			
Subtotal	77.1	182.0	862.4	63.8	23.5			
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7			
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1			
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7			
Barge Tugboat	13.3	39.8	292.8	52.4	6.2			
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2			
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1			
Subtotal	69.5	269.6	1,467.6	262.5	31.0			
Offshore Cable Laying/Burying								
Cable Lay Vessel - Main Engines	36.5	109.6	805.7	144.2	17.0			
Cable Lay Vessel - Generator	12.1	36.3	267.0	47.8	5.6			
Cable Lay Vessel - Generator	8.0	24.0	176.7	31.6	3.7			
Subtotal	56.7	170.0	1,249.3	223.6	26.3			
Vessel Return								
Cable Lay Vessel - Main Engines	9.3	27.9	205.3	36.7	4.3			
Cable Lay Vessel - Generator	1.3	4.0	29.8	5.3	0.6			
Subtotal	10.7	32.0	235.0	42.1	4.9			

Total Emissions - Pounds	405	4,197	4,320	635	145
Total Emissions - Tons	0.20	2.10	2.16	0.32	0.07

Table E-11. Total Emissions Associated with the South Monterey Bay Alternative Landing Site Installatio Activities - Point Lobos to San Jose (Monterey and San Benito Counties Only).

Activities - Foliit Lobos to Sair 503	Pounds						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10		
Cable Laying into Existing Conduit							
Winch-Mounted Truck	4.3	11.7	40.0	3.7	3.2		
Cable Pulling Winch	13.6	315.9	8.2	0.4	0.5		
Subtotal	17.9	327.5	48.2	4.1	3.7		
Cable Trenching along Roads							
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7		
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7		
Fugitive Dust	0.0	0.0	0.0	52.8	26.4		
Subtotal	1.5	5.1	14.3	54.1	27.8		
Cable Hanging on Existing Utility Poles							
Winch-Mounted Truck	18.2	49.3	168.9	15.7	13.5		
Cable Pulling Winch	57.3	1,333.7	34.6	1.8	2.2		
Subtotal	75.6	1,382.9	203.5	17.5	15.7		
Caisson Construction/Land Trenching							
Backhoe	13.4	330.0	8.0	0.0	0.1		
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3		
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1		
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0		
Subtotal	16.0	338.6	32.7	2.3	2.4		
Shore Horizontal Directional Drilling							
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4		
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1		
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2		
Subtotal	77.1	182.0	862.4	63.8	58.7		
Cable Landing to Shore							
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7		
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1		
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7		
Barge Tugboat	13.3	39.8	292.8	52.4	6.2		
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2		
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1		
Subtotal	69.5	269.6	1,467.6	262.5	31.0		
Offshore Cable Laying/Burying							
Cable Lay Vessel - Main Engines	15.4	46.1	339.2	60.7	7.1		
Cable Lay Vessel - Generator	5.1	15.3	112.4	20.1	2.4		
Cable Lay Vessel - Generator	3.4	10.1	74.4	13.3	1.6		
Subtotal	23.9	71.6	526.0	94.2	11.1		
Vessel Return							
Cable Lay Vessel - Main Engines	4.1	12.2	89.8	16.1	1.9		
Cable Lay Vessel - Generator	0.6	1.8	13.0	2.3	0.3		
Subtotal	4.7	14.0	102.8	18.4	2.2		

Total Emissions - Pounds	286	2,591	3,258	517	152
Total Emissions - Tons	0.14	1.30	1.63	0.26	0.08

Table E-12. Total Emissions - All Land Alt - MBUAPCD

	Tons				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.3	0.0	0.0	0.0
Subtotal	0.0	0.3	0.0	0.0	0.0
Cable Trenching along Roads					
Trencher-Mounted Truck	0.1	0.2	0.7	0.1	0.1
Vibratory Trencher	0.0	0.2	0.4	0.0	0.1
Fugitive Dust	0.0	0.0	0.0	0.0	1.0
Subtotal	0.1	0.4	1.1	0.1	1.1
Total Emissions - Tons	0.13	0.69	1.16	0.10	1.14

Table E-13. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Primary Landing Site to San Luis Obispo.

Cable Laying into Existing Conduit (1)		Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel	
Winch-Mounted Truck         350         0.20         1         70         3.9         6         4         94           Cable Pulling Winch         80         0.50         1         40         4.4         4         4         71           Cable Trenching along Roads (2)         Trencher Mounted Truck         350         0.30         1         105         5.9         8         5         235           Vibratory Trencher         100         0.60         1         60         6.7         8         5         266         6         7         8         5         266         1         60         6.7         8         5         266         6         7         8         5         266         6         6         7         8         5         266         6         6         6.7         8         5         266         6         1         60         6.7         8         5         266         6         1         60         6.7         8         5         266         1         40         2.0         1         7         3.9         6         14         329         2         1         40         4.4         4         1	Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)	
Cable Pulling Winch   80   0.50   1   40   4.4   4   4   7T	Cable Laying into Existing Conduit (1)									
Cable Trenching along Roads (2)         Trencher-Mounted Truck         350         0.30         1         105         5.9         8         5         235           Vibratory Trencher         100         0.60         1         60         6.7         8         5         266           Fugitive Dust (3)         NA         NA         0.24         NA         NA         NA         5         1           Cable Hanging on Existing Utility Poles (4)         Winch         350         0.20         1         70         3.9         6         14         249           Cable Pulling Winch         80         0.50         1         40         4.4         4         14         249           Calson Construction         80         0.50         1         40         4.4         4         14         249           Calson Construction         Calson Construction           Backhoe         105         0.60         1         63         3.5         6         2         42           Shore Horizontal Dirilling         Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721	Winch-Mounted Truck	350	0.20	1	70	3.9	6	4	94	
Trencher-Mounted Truck   350   0.30   1   105   5.9   8   5   235	Cable Pulling Winch	80	0.50	1	40	4.4	4	4	71	
Vibratory Trencher         100         0.60         1         60         6.7         8         5         266           Fugitive Dust (3)         NA         NA         0.24         NA         NA         NA         5         1           Cable Hanging on Existing Utility Poles (4)         Winch-Mounted Truck         350         0.20         1         70         3.9         6         14         329           Cable Pulling Winch         80         0.50         1         40         4.4         4         14         249           Caisson Construction         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         2.30         0.12         2	Cable Trenching along Roads (2)									
NA	Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235	
Cable Hanging on Existing Utility Poles (4)         Winch-Mounted Truck         350         0.20         1         70         3.9         6         14         329           Cable Pulling Winch         80         0.50         1         40         4.4         4         14         249           Caisson Construction         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         <	Vibratory Trencher	100	0.60	1	60	6.7	8	5	266	
Winch-Mounted Truck         350         0.20         1         70         3.9         6         14         329           Cable Pulling Winch         80         0.50         1         40         4.4         4         14         249           Caisson Construction         Use Caisson Construction           Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25	Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1	
Cable Pulling Winch         80         0.50         1         40         4.4         4         14         249           Caisson Construction         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213 <td>Cable Hanging on Existing Utility Poles (4)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Cable Hanging on Existing Utility Poles (4)									
Caisson Construction         Backhoe         105         0.60         1         63         3.5         6         2         42           Supply Truck w/ Crane         250         0.30         1         75         4.2         2         1         8           Shore Horizontal Directional Drilling           Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp	Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329	
Backhoe	Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249	
Supply Truck w/ Crane   250   0.30   1   75   4.2   2   1   8	Caisson Construction									
Shore Horizontal Directional Drilling   460   0.70   1   322   18.0   8   5   721	Backhoe	105	0.60	1	63	3.5	6	2	42	
Tracked Drill Rig         460         0.70         1         322         18.0         8         5         721           Drilling Mud Unit         550         0.60         1         330         18.5         8         5         739           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Cable Lay Vessel - Main Engines         2,300         0.12         2         552         27.6         24         2         1,325           Cable Lay Vessel - Generator         1,290         0.25         1         323         16.8         24         2         805           Cable Lay Vessel - Generator         970         0.22         1         213         11.1         24         2         533           Barge Tugboat         1,300         0.40         Total Hp         520         29.1         12         2         699           Work/Dive Boat         340         0.30         1         102         5.7         12         2         137           Power Winch - Onshore         100         0.40         1         40         2.2         4         1         9 <td cols<="" td=""><td>Supply Truck w/ Crane</td><td>250</td><td>0.30</td><td>1</td><td>75</td><td>4.2</td><td>2</td><td>1</td><td>8</td></td>	<td>Supply Truck w/ Crane</td> <td>250</td> <td>0.30</td> <td>1</td> <td>75</td> <td>4.2</td> <td>2</td> <td>1</td> <td>8</td>	Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Drilling Mud Unit       550       0.60       1       330       18.5       8       5       739         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       133         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)       2       300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8	Shore Horizontal Directional Drilling									
Work/Dive Boat     340     0.30     1     102     5.7     12     2     137       Cable Landing to Shore     Cable Lay Vessel - Main Engines     2,300     0.12     2     552     27.6     24     2     1,325       Cable Lay Vessel - Generator     1,290     0.25     1     323     16.8     24     2     805       Cable Lay Vessel - Generator     970     0.22     1     213     11.1     24     2     533       Barge Tugboat     1,300     0.40     Total Hp     520     29.1     12     2     699       Work/Dive Boat     340     0.30     1     102     5.7     12     2     137       Power Winch - Onshore     100     0.40     1     40     2.2     4     1     9       Offshore Cable Laying/Burying (5)       Cable Lay Vessel - Main Engines     2,300     0.22     2     1,012     50.6     24     1     1,214       Cable Lay Vessel - Generator     1,290     0.25     1     323     16.8     24     1     402       Cable Lay Vessel - Generator     970     0.22     1     213     11.1     24     1     266       Vessel Return (6)	Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721	
Cable Landing to Shore         Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       <	Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739	
Cable Lay Vessel - Main Engines       2,300       0.12       2       552       27.6       24       2       1,325         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137	
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       2       805         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Cable Landing to Shore									
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       2       533         Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325	
Barge Tugboat       1,300       0.40       Total Hp       520       29.1       12       2       699         Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805	
Work/Dive Boat       340       0.30       1       102       5.7       12       2       137         Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533	
Power Winch - Onshore       100       0.40       1       40       2.2       4       1       9         Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699	
Offshore Cable Laying/Burying (5)         Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Work/Dive Boat	340	0.30	1	102	5.7	12	2	137	
Cable Lay Vessel - Main Engines       2,300       0.22       2       1,012       50.6       24       1       1,214         Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9	
Cable Lay Vessel - Generator       1,290       0.25       1       323       16.8       24       1       402         Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Offshore Cable Laying/Burying (5)									
Cable Lay Vessel - Generator       970       0.22       1       213       11.1       24       1       266         Vessel Return (6)         Cable Lay Vessel - Main Engines       2,300       0.64       2       2,944       153.1       2.0       1       306	Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1	1,214	
Vessel Return (6)         2,300         0.64         2         2,944         153.1         2.0         1         306	Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1	402	
Cable Lay Vessel - Main Engines         2,300         0.64         2         2,944         153.1         2.0         1         306	Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1	266	
, , , , , , , , , , , , , , , , , , ,	Vessel Return (6)									
Cable Lay Vessel - Generator 970 0.44 1 427 22.2 2.0 1 44	Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.0	1	306	
	Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.0	1	44	

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 14.9 miles.

- (2) Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.
- (3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.
- (4) Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 12 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 12 nm within state waters.

Table E-14. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Cayucos Alternative Landing Site to San Luis Obispo.

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	5	118
Cable Pulling Winch	80	0.50	1	40	4.4	4	5	89
Cable Trenching along Roads (2)								•
Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235
Vibratory Trencher	100	0.60	1	60	6.7	8	5	266
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329
Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling						•		•
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1.2	1,457
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1.2	483
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1.2	320
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.4	1	367
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.4	1	53

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 18.5 miles.

- (2) Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.
- (3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.
- (4) Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 14 nautical miles within state waters (worst-case distance).
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 14 nm within state waters.

Table E-15. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo.

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying from Beach to Existing Conduit								
Skip-borer	200	0.60	1	120	6.7	8	3.0	161
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	5	118
Cable Pulling Winch	80	0.50	1	40	4.4	4	5	89
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235
Vibratory Trencher	100	0.60	1	60	6.7	8	5	266
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329
Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1	1,214
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1	402
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1	266
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.0	1	306
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.0	1	44

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 18.1 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

<sup>(4)</sup> Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.

<sup>(5)</sup> Based on a cruising speed of 1 knot and a cable route of 12 nautical miles within state waters.

<sup>(6)</sup> Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 12 nm within state waters.

Table E-16. Emission Source Data for All Land Alt - MBUAPCD

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Hp-
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Hrs
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	1,260
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	480
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	58	24,360
Vibratory Trencher	100	0.60	1	60	6.7	4	58	13,920
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	58	13.9

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 12 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 46 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-17. Daily Emissions Associated with the Estero Bay Primary Landing Site to San Luis Obispo Installation Activities.

,	Pounds Per Day					
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10	
Cable Laying into Existing Conduit						
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7	
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1	
Subtotal	4.0	72.8	10.7	0.9	8.0	
Cable Trenching along Roads						
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4	
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3	
Fugitive Dust	0.0	0.0	0.0	0.0	13.2	
Subtotal	3.0	10.3	28.7	2.6	15.9	
Cable Hanging on Existing Utility Poles						
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7	
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1	
Subtotal	4.0	72.8	10.7	0.9	0.8	
Caisson Construction						
Backhoe	6.7	165.0	4.0	0.0	0.0	
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3	
Subtotal	7.1	165.9	7.2	0.3	0.3	
Shore Horizontal Directional Drilling						
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7	
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8	
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6	
Subtotal	16.2	38.7	189.7	15.8	12.1	
Cable Landing to Shore						
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8	
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5	
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3	
Barge Tugboat	6.6	19.9	146.4	26.2	3.1	
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6	
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1	
Subtotal	36.3	169.9	734.7	131.3	15.5	
Offshore Cable Laying/Burying						
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7	
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5	
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3	
Subtotal	35.8	107.3	789.1	141.2	16.6	
Vessel Return						
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7	
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4	
Subtotal	6.7	20.0	146.9	26.3	3.1	
SLOCAPCD Daily Thresholds	185	NA	185	NA	NA	

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-18. Daily Emissions from the Estero Bay Cayucos Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds Per Day					
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10	
Cable Laying into Existing Conduit						
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7	
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1	
Subtotal	4.0	72.8	10.7	0.9	0.8	
Cable Trenching along Roads						
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4	
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3	
Fugitive Dust	0.0	0.0	0.0	0.0	13.2	
Subtotal	3.0	10.3	28.7	2.6	15.9	
Cable Hanging on Existing Utility Poles						
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7	
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1	
Subtotal	4.0	72.8	10.7	0.9	8.0	
Caisson Construction						
Backhoe	6.7	165.0	4.0	0.0	0.0	
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3	
Subtotal	7.1	165.9	7.2	0.3	0.3	
Shore Horizontal Directional Drilling						
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7	
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8	
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6	
Subtotal	16.2	38.7	189.7	15.8	12.1	
Cable Landing to Shore						
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8	
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5	
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3	
Barge Tugboat	6.6	19.9	146.4	26.2	3.1	
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6	
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1	
Subtotal	36.3	169.9	734.7	131.3	15.5	
Offshore Cable Laying/Burying						
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7	
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5	
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3	
Subtotal	35.8	107.3	789.1	141.2	16.6	
Vessel Return						
Cable Lay Vessel - Main Engines	7.0	20.9	153.9	27.6	3.2	
Cable Lay Vessel - Generator	1.0	3.0	22.3	4.0	0.5	
Subtotal	8.0	24.0	176.3	31.6	3.7	
SLOCAPCD Daily Thresholds	185	NA	185	NA	NA	

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-19. Daily Emissions Associated with the Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds Per Day				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying from Caisson to Existing Conduit					
Skip-borer	2.7	6.4	29.6	2.0	2.1
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	4.0	72.8	10.7	0.9	0.8
Cable Trenching along Roads					
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	3.0	10.3	28.7	2.6	15.9
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	4.0	72.8	10.7	0.9	0.8
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	7.1	165.9	7.2	0.3	0.3
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	16.2	38.7	189.7	15.8	12.1
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	36.3	169.9	734.7	131.3	15.5
Offshore Cable Laying/Burying		•			
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	35.8	107.3	789.1	141.2	16.6
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4
Subtotal	6.7	20.0	146.9	26.3	3.1

SLOCAPCD Daily Thresholds 185 NA 185 NA NA

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-20. Total Emissions Associated with the Estero Bay Primary Landing Site to San Luis Obispo Installation Activities.

·	Pounds				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	3.8	10.4	35.6	3.3	2.8
Cable Pulling Winch	12.1	280.8	7.3	0.4	0.5
Subtotal	15.9	291.1	42.8	3.7	3.3
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	15.0	51.3	143.4	12.8	79.7
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	55.7	1,019.0	149.9	12.9	11.6
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	13.8	330.9	11.2	0.3	0.4
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	77.1	182.0	862.4	63.8	58.7
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	69.5	269.6	1,467.6	262.5	31.0
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	35.8	107.3	789.1	141.2	16.6
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4
Subtotal	6.7	20.0	146.9	26.3	3.1
Total Emissions - Pounds	289	2,271	3,613	523	204

Total Emissions - Tons	0.14	1.14	1.81	0.26	0.10
Mitigated Total Emissions - Tons (1)	0.12	1.14	1.54	0.26	0.10
SLOCAPCD Quarterly Thresholds - Tons	2.50	NA	2.50	NA	NA

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-21. Total Emissions Associated with the Estero Bay Cayucos Alternative Landing Site to San Luis Obispo Installation Activities.

·	Pounds				
Activity/Equipment Type	ROC	CO	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	4.8	13.0	44.4	4.1	3.6
Cable Pulling Winch	15.1	351.0	9.1	0.5	0.6
Subtotal	19.9	363.9	53.5	4.6	4.1
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	15.0	51.3	143.4	12.8	79.7
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	55.7	1,019.0	149.9	12.9	11.6
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	13.8	330.9	11.2	0.3	0.4
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	77.1	182.0	862.4	63.8	58.7
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	69.5	269.6	1,467.6	262.5	31.0
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	27.7	83.1	610.6	109.3	12.9
Cable Lay Vessel - Generator	9.2	27.5	202.4	36.2	4.3
Cable Lay Vessel - Generator	6.1	18.2	133.9	24.0	2.8
Subtotal	42.9	128.8	946.9	169.5	19.9
Vessel Return					
Cable Lay Vessel - Main Engines	7.0	20.9	153.9	27.6	3.2
Cable Lay Vessel - Generator	1.0	3.0	22.3	4.0	0.5
Subtotal	8.0	24.0	176.3	31.6	3.7
Total Emissions - Pounds	302	2,370	3,811	558	209

Total Emissions - Tons	0.15	1.18	1.91	0.28	0.10
Mitigated Total Emissions - Tons (1)	0.13	1.18	1.62	0.28	0.10
SLOCAPCD Quarterly Thresholds - Tons	2.50	NA	2.50	NA	NA

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-22. Total Emissions Associated with the Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds				
Activity/Equipment Type	ROC	CO	NOx	SO2	PM10
Cable Laying from Caisson to Existing Conduit					
Skip-borer	8.2	19.2	88.9	5.9	6.3
Cable Laying into Existing Conduit					
Winch-Mounted Truck	4.8	13.0	44.4	4.1	3.6
Cable Pulling Winch	15.1	351.0	9.1	0.5	0.6
Subtotal	19.9	363.9	53.5	4.6	4.1
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	15.0	51.3	143.4	12.8	79.7
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	55.7	1,019.0	149.9	12.9	11.6
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	13.8	330.9	11.2	0.3	0.4
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	77.1	182.0	862.4	63.8	58.7
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	69.5	269.6	1,467.6	262.5	31.0
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	35.8	107.3	789.1	141.2	16.6
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4

Subtotal	6.7	20.0	146.9	26.3	3.1
Total Emissions - Pounds	302	2,363	3,713	530	211
Total Emissions - Tons	0.15	1.18	1.86	0.27	0.11
Mitigated Total Emissions - Tons (1)	0.13	1.18	1.58	0.27	0.11
SLOCAPCD Quarterly Thresholds - Tons	2.50	NA	2.50	NA	NA

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-23. Total Emissions - All Land Alt - SLOCAPCD

	Tons				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.1	0.0	0.0	0.0
Subtotal	0.0	0.1	0.0	0.0	0.0
Cable Trenching along Roads					
Trencher-Mounted Truck	0.0	0.1	0.3	0.0	0.0
Vibratory Trencher	0.0	0.1	0.2	0.0	0.0
Fugitive Dust	0.0	0.0	0.0	0.0	0.4
Subtotal	0.0	0.1	0.4	0.0	0.4
Total Emissions - Tons	0.05	0.26	0.43	0.04	0.42
SLOCAPCD Quarterly Thresholds - Tons	2.50	NA	2.50	NA	NA

Table E-24. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Landing Site.

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	9	212
Cable Pulling Winch	80	0.50	1	40	4.4	4	9	160
Cable Trenching along Roads (2)						-	-	
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	1	6
Vibratory Trencher	100	0.60	1	60	6.7	1	1	7
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	1	0.2
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	2	47
Cable Pulling Winch	80	0.50	1	40	4.4	4	2	36
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Cable Laying from Manhole to Shore								
Skip-borer	200	0.60	1	120	6.7	8	4	215
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	6	866
Drilling Mud Unit	550	0.60	1	330	18.5	8	6	887
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore							<u> </u>	
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)							l	
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	15	1	759
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	15	1	252
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	15	1	166
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	147.2	1.3	1	191
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	1.3	1	29

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35.4 miles.

- (2) Based on an installation rate of 0.8 miles/day and a total distance of 0.6 miles.
- (3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.
- (4) Based on an installation rate of 1 mile/day and a total distance of 1.6 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 7.5 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 7.5 nm within state waters.

Table E-25. Emission Source Data for All Land Alt - SCAQMD

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Hp-
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Hrs
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	7	2,940
Cable Pulling Winch	80	0.50	1	40	4.4	4	7	1,120
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	133	55,860
Vibratory Trencher	100	0.60	1	60	6.7	4	133	31,920
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	133	31.9

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 27 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 107 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-26. Daily Emissions for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Site.

	Pounds Per Day						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10		
Cable Laying into Existing Conduit							
Winch-Mounted Truck	1.0	2.6	8.9	8.0	0.7		
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1		
Subtotal	4.0	72.8	10.7	0.9	0.8		
Cable Trenching along Roads							
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2		
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2		
Fugitive Dust	0.0	0.0	0.0	0.0	11.0		
Subtotal	0.4	1.3	3.6	0.3	11.3		
Cable Hanging on Existing Utility Poles							
Winch-Mounted Truck	1.0	2.6	8.9	8.0	0.7		
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1		
Subtotal	4.0	72.8	10.7	0.9	0.8		
Caisson Construction							
Backhoe	6.7	165.0	4.0	0.0	0.0		
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3		
Subtotal	7.1	165.9	7.2	0.3	0.3		
Cable Laying from Manhole to Shore							
Skip-borer	2.7	6.4	29.6	2.0	2.1		
Shore Horizontal Directional Drilling							
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7		
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8		
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6		
Subtotal	16.2	38.7	189.7	15.8	12.1		
Cable Landing to Shore							
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8		
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5		
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3		
Barge Tugboat	6.6	19.9	146.4	26.2	3.1		
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6		
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1		
Subtotal	36.3	169.9	734.7	131.3	15.5		
Offshore Cable Laying/Burying							
Cable Lay Vessel - Main Engines	14.4	43.3	318.0	56.9	6.7		
Cable Lay Vessel - Generator	4.8	14.3	105.4	18.9	2.2		
Cable Lay Vessel - Generator	3.2	9.5	69.7	12.5	1.5		
Subtotal	22.4	67.1	493.2	88.3	10.4		
Vessel Return							
Cable Lay Vessel - Main Engines	3.6	10.9	80.2	14.4	1.7		
Cable Lay Vessel - Generator	0.5	1.6	12.1	2.2	0.3		

Subtotal	4.2	12.6	92.3	16.5	1.9
SCAQMD Daily Thresholds	75	550	100	150	150

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diesel for on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-27. Total Emissions for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Site.

			Pounds	Pounds					
Activity/Equipment Type	ROC	CO	NOx	SO2	PM10				
Cable Laying into Existing Conduit									
Winch-Mounted Truck	8.6	23.3	80.0	7.4	6.4				
Cable Pulling Winch	27.2	631.7	16.4	0.9	1.0				
Subtotal	35.8	655.1	96.4	8.3	7.4				
Cable Trenching along Roads									
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2				
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2				
Fugitive Dust	0.0	0.0	0.0	0.0	11.0				
Subtotal	0.4	1.3	3.6	0.3	11.3				
Cable Hanging on Existing Utility Poles									
Winch-Mounted Truck	1.9	5.2	17.8	1.6	1.4				
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2				
Subtotal	8.0	145.6	21.4	1.8	1.7				
Caisson Construction									
Backhoe	13.4	330.0	8.0	0.0	0.1				
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3				
Subtotal	13.8	330.9	11.2	0.3	0.4				
Cable Laying from Manhole to Shore									
Skip-borer	11.0	25.7	118.5	7.9	8.5				
Shore Horizontal Directional Drilling									
Tracked Drill Rig	44.2	103.2	477.0	31.7	34.1				
Drilling Mud Unit	45.3	105.8	488.9	32.5	34.9				
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2				
Subtotal	92.0	216.9	1,023.4	74.5	70.2				
Cable Landing to Shore									
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7				
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1				
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7				
Barge Tugboat	13.3	39.8	292.8	52.4	6.2				
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2				
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1				
Subtotal	69.5	269.6	1,467.6	262.5	31.0				
Offshore Cable Laying/Burying									
Cable Lay Vessel - Main Engines	14.4	43.3	318.0	56.9	6.7				
Cable Lay Vessel - Generator	4.8	14.3	105.4	18.9	2.2				
Cable Lay Vessel - Generator	3.2	9.5	69.7	12.5	1.5				
Subtotal	22.4	67.1	493.2	88.3	10.4				
Vessel Return									
Cable Lay Vessel - Main Engines	3.6	10.9	80.2	14.4	1.7				
Cable Lay Vessel - Generator	0.5	1.6	12.1	2.2	0.3				

Subtotal	4.2	12.6	92.3	16.5	1.9
Total Emissions - Pounds	257	1,725	3,327	460	143
Total Emissions - Tons	0.13	0.86	1.66	0.23	0.07
Mitigated Total Emissions - Tons (1)	0.11	0.86	1.41	0.23	0.07
SCAQMD Quarterly Thresholds - Tons	2.50	24.75	2.50	6.75	6.75

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-28. Total Emissions - All Land Alt - SCAQMD

		Tons						
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10			
Cable Laying into Existing Conduit								
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0			
Cable Pulling Winch	0.0	0.2	0.0	0.0	0.0			
Subtotal	0.0	0.3	0.0	0.0	0.0			
Cable Trenching along Roads								
Trencher-Mounted Truck	0.1	0.2	0.6	0.1	0.0			
Vibratory Trencher	0.0	0.2	0.4	0.0	0.0			
Fugitive Dust	0.0	0.0	0.0	0.0	0.9			
Subtotal	0.1	0.3	1.0	0.1	1.0			
Total Emissions - Tons	0.11	0.60	0.99	0.09	0.97			
SCAQMD Quarterly Thresholds - Tons	2.50	24.75	2.50	6.75	6.75			

Table E-29. Emission Source Data for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	71
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	53
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	0.5	3
Vibratory Trencher	100	0.60	1	60	6.7	1	0.5	3
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	0.5	0.2
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (4)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	7	1	354
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	7	1	117
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	7	1	78
Vessel Return (5)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	0.6	1	92
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	0.6	1	13

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 10.9 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 0.4 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dimensions of this area would be 0.4 mile x 20 feet.

<sup>(4)</sup> Based on a cruising speed of 1 knot and a cable route of 3.5 nautical miles within state waters.

<sup>(5)</sup> Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 3.5 nm within state waters.

Table E-30. Emission Source Data for Proposed Onshore and State Waters Construction Activities - San Diego Alternative Landing Site.

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Fuel
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Usage (Gal)
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	71
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	53
Cable Trenching within Railroad ROW (2)								
Trencher	300	0.50	2	300	15.0	8	5	600
Supply Truck	350	0.20	1	70	3.9	4	5	78
Fugitive Dust (3)	NA	NA	1	NA	NA	NA	5	5
Cable Trenching along Roads (4)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	0.5	3
Vibratory Trencher	100	0.60	1	60	6.7	1	0.5	3
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	0.5	0.2
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	8	1	405
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	8	1	134
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	8	1	89
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	0.7	1	107
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	0.7	1	16

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 10.9 miles.

- (2) Based on an installation rate of 3 miles/day and a total distance of 14.7 miles.
- (3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dimensions of this area would be 0.4 mile x 20 feet.
- (4) Based on an installation rate of 0.8 miles/day and a total distance of 0.4 miles.
- (5) Based on a cruising speed of 1 knot and a cable route of 4 nautical miles within state waters.
- (6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 4 nm within state waters.

Table E-31. Emission Source Data for All Land Alt - SDCAPCD

	Horsepower	Load	Number	Нр-	Gal/	Hours	Work	Total Hp-
Activity/Equipment Type	(Hp)	Factor	Active	Hrs	Hour	/Day	Days	Hrs
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	1,260
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	480
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	44	18,480
Vibratory Trencher	100	0.60	1	60	6.7	4	44	10,560
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	44	10.6

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 9 miles.

<sup>(2)</sup> Based on an installation rate of 0.8 miles/day and a total distance of 35 miles.

<sup>(3)</sup> Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The direction the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-32. Daily Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

San Diego Primary Landing Site.	1	Pi	ounds Per Da	av	
Activity/Equipment Type	ROC	со	NOx	502	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	4.0	72.8	10.7	0.9	0.8
Cable Trenching within Railroad ROW					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Trencher-Mounted Truck	0.4	1.3	3.6	0.3	11.3
Vibratory Trencher					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	7.1	165.9	7.2	0.3	0.3
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	16.2	38.7	189.7	15.8	12.1
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	36.3	169.9	734.7	131.3	15.5
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	6.7	20.2	148.4	26.6	3.1
Cable Lay Vessel - Generator	2.2	6.7	49.2	8.8	1.0
Cable Lay Vessel - Generator	1.5	4.4	32.5	5.8	0.7
Subtotal	10.4	31.3	230.1	41.2	4.8
Vessel Return					
Cable Lay Vessel - Main Engines	1.7	5.2	38.5	6.9	8.0
Cable Lay Vessel - Generator	0.3	0.8	5.6	1.0	0.1
Subtotal	2.0	6.0	44.1	7.9	0.9

Note: Peak daily emissions would occur during cable landing to shore.

Table E-33. Daily Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Alternate Landing Site.

		Po	ounds Per Da	ny	
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	8.0	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	4.0	72.8	10.7	0.9	0.8
Cable Trenching within Railroad ROW					
Trencher	5.4	25.4	54.5	4.6	6.6
Supply Truck	0.6	1.7	5.9	0.5	0.5
Fugitive Dust	0.0	0.0	0.0	0.0	55.0
Subtotal	6.1	27.1	60.4	5.1	62.0
Cable Trenching along Roads					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	0.4	1.3	3.6	0.3	11.3
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	7.1	165.9	7.2	0.3	0.3
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	16.2	38.7	189.7	15.8	12.1
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	36.3	169.9	734.7	131.3	15.5
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	7.7	23.1	169.6	30.4	3.6
Cable Lay Vessel - Generator	2.5	7.6	56.2	10.1	1.2
Cable Lay Vessel - Generator	1.7	5.1	37.2	6.7	0.8
Subtotal	11.9	35.8	263.0	47.1	5.5
Vessel Return					
Cable Lay Vessel - Main Engines	2.0	6.1	44.9	8.0	0.9
Cable Lay Vessel - Generator	0.3	0.9	6.5	1.2	0.1
Subtotal	2.3	7.0	51.4	9.2	1.1

Note: Peak daily emissions would occur during cable landing to shore.

Table E-34. Total Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	San Diego Primary Landing Site.					
Cable Laying into Existing Conduit   Winch-Mounted Truck   2.9   7.8   26.7   2.5   2.1						
Winch-Mounted Truck   2.9   7.8   26.7   2.5   2.1		ROC	CO	NOx	S02	PM10
Cable Pulling Winch   9.1   210.6   5.5   0.3   0.3   Subtotal   11.9   218.4   32.1   2.8   2.5   Cable Trenching within Railroad ROW   Trencher-Mounted Truck   0.1   0.3   1.1   0.1   0.1   0.1   Vibratory Trencher   0.1   0.3   0.7   0.1   0.1   0.1   Vibratory Trencher   0.1   0.3   0.7   0.1   0.1   0.1   Vibratory Trencher   0.1   0.0   0.0   0.0   0.0   0.0   0.1   11.0   Subtotal   0.2   0.6   1.8   0.2   11.2   Caisson Construction   Backhoe   13.4   330.0   8.0   0.0   0.1   Subtotal   33.8   330.9   11.2   0.3   0.4   Subtotal   31.8   330.9   31.2   0.3   0.3   Subtotal   31.8   330.9   31.2   0.3   0.4   Shore Horizontal Directional Drilling   36.8   86.0   397.5   26.4   28.4   Drilling Mud Unit   37.7   88.2   407.4   27.1   29.1   Work/Dive Boat   2.6   7.8   57.4   10.3   1.2   Subtotal   77.1   182.0   862.4   63.8   58.7   Cable Landing to Shore   Cable Landing to Shore   Cable Lay Vessel - Main Engines   25.2   75.5   555.1   99.4   11.7   Cable Lay Vessel - Generator   15.3   45.9   337.3   60.4   7.1   Cable Lay Vessel - Generator   10.1   30.4   223.2   39.9   4.7   Barge Tugboat   31.3   39.8   292.8   52.4   6.2   Work/Dive Boat   2.6   7.8   57.4   10.3   1.2   Power Winch - Onshore   3.0   70.2   1.8   0.1   0.1   Subtotal   69.5   269.6   1,467.6   262.5   31.0   Offshore Cable Laying/Burying   Cable Lay Vessel - Generator   2.2   6.7   49.2   8.8   1.0   Cable Lay Vessel - Generator   2.2   6.7   49.2   8.8   1.0   Cable Lay Vessel - Generator   2.2   6.7   49.2   8.8   1.0   Cable Lay Vessel - Generator   2.2   6.7   49.2   8.8   1.0   Cable Lay Vessel - Generator   3.0   70.2   1.8   0.1   0.1   Subtotal   10.4   31.3   230.1   41.2   4.8   4.						
Subtotal	Winch-Mounted Truck	2.9	7.8	26.7	2.5	2.1
Trencher-Mounted Truck	Cable Pulling Winch	9.1	210.6	5.5	0.3	0.3
Trencher-Mounted Truck	Subtotal	11.9	218.4	32.1	2.8	2.5
Vibratory Trencher         0.1         0.3         0.7         0.1         0.1           Fugitive Dust         0.0         0.0         0.0         0.0         0.0         11.0           Subtotal         0.2         0.6         1.8         0.2         11.2           Backhoe         13.4         330.0         8.0         0.0         0.1           Supply Truck w/ Crane         0.3         0.9         3.2         0.3         0.3           Subtotal         13.8         330.9         11.2         0.3         0.4           Shore Horizontal Directional Drilling         Tracked Drill Rig           Drilling Mud Unit         37.7         88.2         407.4         27.1         29.1           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Subtotal         7.1         182.0         862.4         63.8         58.7           Cable Landing to Shore         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9						
Fuglitive Dust   0.0   0.0   0.0   0.0   11.0	Trencher-Mounted Truck	0.1	0.3	1.1	0.1	0.1
Subtotal   0.2   0.6   1.8   0.2   11.2	3	0.1	0.3	0.7	0.1	0.1
Caisson Construction         Backhoe         13.4         330.0         8.0         0.0         0.1           Supply Truck w/ Crane         0.3         0.9         3.2         0.3         0.3           Subtotal         13.8         330.9         11.2         0.3         0.4           Shore Horizontal Directional Drilling         Tracked Drill Rig         36.8         86.0         397.5         26.4         28.4           Drilling Mud Unit         37.7         88.2         407.4         27.1         29.1           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Subtotal         77.1         182.0         862.4         63.8         58.7           Cable Landing to Shore         Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         15.3         45.9         337.3         60.4         7.1           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9         4.7           Barge Tugboat         13.3         39.8         292.8         52.4         6.2           Work/Dive Boat         2.6         7.8	Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Backhoe	Subtotal	0.2	0.6	1.8	0.2	11.2
Supply Truck w/ Crane   0.3   0.9   3.2   0.3   0.3	Caisson Construction					
Subtotal   13.8   330.9   11.2   0.3   0.4	Backhoe	13.4	330.0	8.0	0.0	0.1
Shore Horizontal Directional Drilling   36.8   86.0   397.5   26.4   28.4	Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Tracked Drill Rig         36.8         86.0         397.5         26.4         28.4           Drilling Mud Unit         37.7         88.2         407.4         27.1         29.1           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Subtotal         77.1         182.0         862.4         63.8         58.7           Cable Landing to Shore         Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         15.3         45.9         337.3         60.4         7.1           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9         4.7           Barge Tugboat         13.3         39.8         292.8         52.4         6.2           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Power Winch - Onshore         3.0         70.2         1.8         0.1         0.1           Subtotal         69.5         269.6         1,467.6         262.5         31.0           Offshore Cable Lay Vessel - Main Engines         6.7         20.2         148.4         26.6         3.1	Subtotal	13.8	330.9	11.2	0.3	0.4
Drilling Mud Unit   37.7   88.2   407.4   27.1   29.1	Shore Horizontal Directional Drilling					
Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Subtotal         77.1         182.0         862.4         63.8         58.7           Cable Landing to Shore         Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         15.3         45.9         337.3         60.4         7.1           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9         4.7           Barge Tugboat         13.3         39.8         292.8         52.4         6.2           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Power Winch - Onshore         3.0         70.2         1.8         0.1         0.1           Subtotal         69.5         269.6         1,467.6         262.5         31.0           Offshore Cable Laying/Burying         20.2         148.4         26.6         3.1           Cable Lay Vessel - Main Engines         6.7         20.2         148.4         26.6         3.1           Cable Lay Vessel - Generator         1.5         4.4         32.5         5.8         0.7	Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Subtotal         77.1         182.0         862.4         63.8         58.7           Cable Landing to Shore         Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         15.3         45.9         337.3         60.4         7.1           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9         4.7           Barge Tugboat         13.3         39.8         292.8         52.4         6.2           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Power Winch - Onshore         3.0         70.2         1.8         0.1         0.1           Subtotal         69.5         269.6         1,467.6         262.5         31.0           Offshore Cable Laying/Burying         Cable Lay Vessel - Main Engines         6.7         20.2         148.4         26.6         3.1           Cable Lay Vessel - Generator         2.2         6.7         49.2         8.8         1.0           Cable Lay Vessel - Generator         1.5         4.4         32.5         5.8         0.7           Subtotal         10.4         31.3	Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Cable Landing to Shore       25.2       75.5       555.1       99.4       11.7         Cable Lay Vessel - Generator       15.3       45.9       337.3       60.4       7.1         Cable Lay Vessel - Generator       10.1       30.4       223.2       39.9       4.7         Barge Tugboat       13.3       39.8       292.8       52.4       6.2         Work/Dive Boat       2.6       7.8       57.4       10.3       1.2         Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying       50.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Main Engines       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       0.3       0.8       5.6       1.0       0.1         S	Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Cable Lay Vessel - Main Engines         25.2         75.5         555.1         99.4         11.7           Cable Lay Vessel - Generator         15.3         45.9         337.3         60.4         7.1           Cable Lay Vessel - Generator         10.1         30.4         223.2         39.9         4.7           Barge Tugboat         13.3         39.8         292.8         52.4         6.2           Work/Dive Boat         2.6         7.8         57.4         10.3         1.2           Power Winch - Onshore         3.0         70.2         1.8         0.1         0.1           Subtotal         69.5         269.6         1,467.6         262.5         31.0           Offshore Cable Laying/Burying         0.7         0.2         148.4         26.6         3.1           Cable Lay Vessel - Main Engines         6.7         20.2         148.4         26.6         3.1           Cable Lay Vessel - Generator         2.2         6.7         49.2         8.8         1.0           Cable Lay Vessel - Main Engines         1.5         4.4         32.5         5.8         0.7           Subtotal         10.4         31.3         230.1         41.2         4.8           V	Subtotal	77.1	182.0	862.4	63.8	58.7
Cable Lay Vessel - Generator       15.3       45.9       337.3       60.4       7.1         Cable Lay Vessel - Generator       10.1       30.4       223.2       39.9       4.7         Barge Tugboat       13.3       39.8       292.8       52.4       6.2         Work/Dive Boat       2.6       7.8       57.4       10.3       1.2         Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying       Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0 </td <td>Cable Landing to Shore</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Cable Landing to Shore					
Cable Lay Vessel - Generator       10.1       30.4       223.2       39.9       4.7         Barge Tugboat       13.3       39.8       292.8       52.4       6.2         Work/Dive Boat       2.6       7.8       57.4       10.3       1.2         Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying       0.0       0.0       0.0       3.0       70.2       148.4       26.6       3.1         Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Barge Tugboat       13.3       39.8       292.8       52.4       6.2         Work/Dive Boat       2.6       7.8       57.4       10.3       1.2         Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying       Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.	Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Work/Dive Boat       2.6       7.8       57.4       10.3       1.2         Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying         Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       2.0       5.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19 <td>Cable Lay Vessel - Generator</td> <td>10.1</td> <td>30.4</td> <td>223.2</td> <td>39.9</td> <td>4.7</td>	Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Power Winch - Onshore       3.0       70.2       1.8       0.1       0.1         Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying         Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       2.0       5.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Subtotal       69.5       269.6       1,467.6       262.5       31.0         Offshore Cable Laying/Burying       Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05		2.6	7.8	57.4	10.3	1.2
Offshore Cable Laying/Burying         Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       2.0       5.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Cable Lay Vessel - Main Engines       6.7       20.2       148.4       26.6       3.1         Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       2.0       6.0       3.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Subtotal	69.5	269.6	1,467.6	262.5	31.0
Cable Lay Vessel - Generator       2.2       6.7       49.2       8.8       1.0         Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       2.0       5.2       38.5       6.9       0.8         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Offshore Cable Laying/Burying					
Cable Lay Vessel - Generator       1.5       4.4       32.5       5.8       0.7         Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return         Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Cable Lay Vessel - Main Engines	6.7	20.2	148.4	26.6	3.1
Subtotal       10.4       31.3       230.1       41.2       4.8         Vessel Return       Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Cable Lay Vessel - Generator	2.2	6.7	49.2	8.8	1.0
Vessel Return         1.7         5.2         38.5         6.9         0.8           Cable Lay Vessel - Generator         0.3         0.8         5.6         1.0         0.1           Subtotal         2.0         6.0         44.1         7.9         0.9           Total Emissions - Pounds         185         1,039         2,649         379         109           Total Emissions - Tons         0.09         0.52         1.32         0.19         0.05	Cable Lay Vessel - Generator	1.5	4.4	32.5	5.8	0.7
Cable Lay Vessel - Main Engines       1.7       5.2       38.5       6.9       0.8         Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Subtotal	10.4	31.3	230.1	41.2	4.8
Cable Lay Vessel - Generator       0.3       0.8       5.6       1.0       0.1         Subtotal       2.0       6.0       44.1       7.9       0.9         Total Emissions - Pounds       185       1,039       2,649       379       109         Total Emissions - Tons       0.09       0.52       1.32       0.19       0.05	Vessel Return					
Subtotal         2.0         6.0         44.1         7.9         0.9           Total Emissions - Pounds         185         1,039         2,649         379         109           Total Emissions - Tons         0.09         0.52         1.32         0.19         0.05	Cable Lay Vessel - Main Engines	1.7	5.2	38.5	6.9	0.8
Total Emissions - Pounds         185         1,039         2,649         379         109           Total Emissions - Tons         0.09         0.52         1.32         0.19         0.05	Cable Lay Vessel - Generator	0.3	0.8	5.6	1.0	0.1
Total Emissions - Tons         0.09         0.52         1.32         0.19         0.05	Subtotal	2.0	6.0	44.1	7.9	0.9
	Total Emissions - Pounds	185	1,039	2,649	379	109
Annual Emission Thresholds - Tons 50 100 50 100 100	Total Emissions - Tons	0.09	0.52	1.32	0.19	0.05
	Annual Emission Thresholds - Tons	50	100	50	100	100

Note: All emissions would occur within one calendar year.

Table E-35. Total Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Alternate Landing Site.

	Total Pounds				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	2.9	7.8	26.7	2.5	2.1
Cable Pulling Winch	9.1	210.6	5.5	0.3	0.3
Subtotal	11.9	218.4	32.1	2.8	2.5
Cable Trenching within Railroad ROW					
Trencher	27.1	127.0	272.5	22.8	32.8
Supply Truck	3.2	8.6	29.6	2.7	2.4
Fugitive Dust	0.0	0.0	0.0	0.0	275.0
Subtotal	30.3	135.6	302.1	25.5	310.1
Cable Trenching along Roads					
Trencher-Mounted Truck	0.1	0.3	1.1	0.1	0.1
Vibratory Trencher	0.1	0.3	0.7	0.1	0.1
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	0.2	0.6	1.8	0.2	11.2
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	13.8	330.9	11.2	0.3	0.4
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	77.1	182.0	862.4	63.8	58.7
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	69.5	269.6	1,467.6	262.5	31.0
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	7.7	23.1	169.6	30.4	3.6
Cable Lay Vessel - Generator	2.5	7.6	56.2	10.1	1.2
Cable Lay Vessel - Generator	1.7	5.1	37.2	6.7	0.8
Subtotal	11.9	35.8	263.0	47.1	5.5
Vessel Return					
Cable Lay Vessel - Main Engines	2.0	6.1	44.9	8.0	0.9
Cable Lay Vessel - Generator	0.3	0.9	6.5	1.2	0.1
Subtotal	2.3	7.0	51.4	9.2	1.1

Total Emissions - Pounds	217	1,180	2,992	411	420
Total Emissions - Tons	0.11	0.59	1.50	0.21	0.21
Annual Emission Thresholds - Tons	50	100	50	100	100

Note: All emissions would occur within one calendar year.

Table E-36. Total Emissions - All Land Alt - SDCAPCD

	Tons				
Activity/Equipment Type	ROC	СО	NOx	SO2	PM10
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.1	0.0	0.0	0.0
Subtotal	0.0	0.1	0.0	0.0	0.0
Cable Trenching along Roads					
Trencher-Mounted Truck	0.0	0.1	0.2	0.0	0.0
Vibratory Trencher	0.0	0.1	0.1	0.0	0.0
Fugitive Dust	0.0	0.0	0.0	0.0	0.3
Subtotal	0.0	0.1	0.3	0.0	0.3
Total Emissions - Tons	0.04	0.22	0.33	0.03	0.32
Annual Emission Thresholds - Tons	50	100	50	100	100

Note: All emissions would occur within one calendar year.